

Remarks

Claims 1, 3-5, and 8-35 are pending in the application. No claim has been canceled. Claims 10 and 25-35 have been amended to conform their dependencies to claim cancellations made previously.

Claim Rejections Based on 35 USC § 112¶1

Claims 1, 3-5, and 8-35 stand rejected under 35 USC § 112¶1 based on the Examiner's contention that the phrase "and one to four inclusive non-chelating ligands" is not supported in the Specification because there is no statement in the specification identifying the recited ligands as non-chelating.

The Applicant respectfully traverses on the grounds that ample support can be found in the specification for the fact that the ligands recited in claim 1 are non-chelating. The Applicants direct the Examiner to the following section listing monodentate (i.e., non-chelating) ligands which can be found in the specification, on page 35, beginning on line 29.

"Phosphine ligands are commercially available or can be prepared by methods similar to processes known per se. The phosphines can be *monodentate* phosphine ligands, such as trimethylphosphine, triethylphosphine, tripropylphosphine, triisopropylphosphine, tributylphosphine, tricyclohexylphosphine, trimethyl phosphite, triethyl phosphite, tripropyl phosphite, triisopropyl phosphite, tributyl phosphite and tricyclohexyl phosphite, in particular triphenylphosphine, tri(o-tolyl)phosphine, triisopropylphosphine or tricyclohexylphosphine."

In addition, the Applicants direct the Examiner to page 34 of the specification, on which a number of palladium catalysts with non-chelating ligands are explicitly mentioned, including PdCl_2 , $\text{Pd}(\text{OAc})_2$, $(\text{CH}_3\text{CN})_2\text{PdCl}_2$, $\text{Pd}(\text{P}(\text{C}_6\text{H}_5)_3)_4$, and polymer supported $\text{Pd}(0)$. Furthermore, the Applicants remind the Examiner that he has already acknowledged in the previous Office Communication, dated April 16, 2003, that the ligands recited in claim 1 are non-chelating

ligands. The Applicants respectfully contend that they have provided sufficient support for the notion that the ligands recited in claim 1 are non-chelating ligands.

In regards to the Examiner's contention that the language in the Specification, on page 34, at lines 23-24, indicates that alkyl phosphines are chelating ligands, the Applicants remind the Examiner that the term alkyl is defined in the definitions section to include substituted alkyl groups, e.g., amino substituted alkyl group, hydroxyl substituted alkyl groups, etc. In order for a trialkyl phosphine ligand to be a chelating ligand, at least one of the alkyl groups would have to be substituted by a group that could coordinate to a metal atom, such coordinating groups might include an amino or hydroxyl group. In contrast, the alkyl moieties of the specific alkyl phosphine ligands recited in claim 1 are all *saturated* alkyl groups. Consequently, the specific alkyl phosphine ligands recited in claim 1 are non-chelating ligands because the alkyl groups attached to the phosphorous atom do not contain functional groups that may coordinate to a metal atom.

Accordingly, withdrawal of the rejections under 35 USC § 112¶1 is respectfully requested.

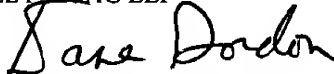
Fees

The Applicants believe no fee is due in connection with the filing of this paper. Nevertheless, the Director is hereby authorized to charge any required fee to our Deposit Account, 06-1448.

Conclusion

In view of the above amendments and remarks, it is believed that the pending claims are in condition for allowance. If a telephone conversation with Applicants' Attorney would expedite prosecution of the above-identified application, the Examiner is urged to contact the undersigned at (617) 832-1000.

Respectfully submitted,
FOLEY HOAG LLP



Dana M. Gordon, Ph.D.
Registration No.: 44,719
Attorney for Applicants

Patent Group
FOLEY HOAG LLP
155 Seaport Boulevard
Boston, MA 02210

(617) 832-1000
(617) 832-7000 (FAX)

Date: 12/23/03